

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: **07119537 A**

(43) Date of publication of application: 09 . 05 . 95

(51) Int. Cl.

F02D 45/00(21) Application number: **05264558**

(22) Date of filing: 22 . 10 . 93

(71) Applicant: **HITACHI LTD**(72) Inventor: **NAKAZURU KUNIHITO
SASAKI SHOJI**(54) **CONTROL DEVICE**

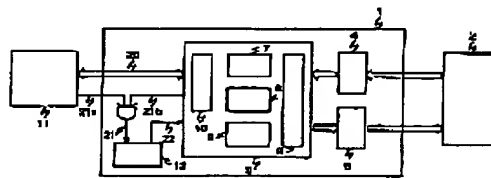
not to restart the CPU 3.

(57) Abstract:

COPYRIGHT: (C)1995,JPO

PURPOSE: To enable the erasing and writing of data to a non-volatile memory from external equipment by stopping the action of a monitoring circuit temporarily from the external equipment at the required time in a control device provided with the monitoring circuit for restarting a CPU at the abnormal time of the CPU.

CONSTITUTION: In a control device 1, a detection signal from an operating state detecting sensor in an engine 2 is waveform-processed by an input processing circuit 4, the optimum operating state is computed by a CPU 3, and a computed control signal is outputted to the engine 2 by an output circuit 5. A monitoring circuit 12 monitors the action of the CPU 3 by a monitor signal 21, and when the monitor signal 21 disappears, the monitoring circuit 12 judges the CPU 3 to be abnormal and restarts the CPU 3 by a restart signal 22. At the time of erasing and writing data to an ROM 8 from external equipment 11, however, the action of the CPU 3 is temporarily stopped, that is, the action of the monitoring circuit 12 is temporarily stopped from the external equipment so as



BEST AVAILABLE COPY